

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	("20050163374").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 08:25
L2	188	(image WITH segment\$) AND (identify\$3 WITH background WITH region)	US-PGPUB; USPAT	OR	ON	2007/07/20 10:51
L3	1	(image WITH segment\$) AND (identify\$3 WITH background WITH region) AND (calculat\$3 WITH luminance WITH histogram)	US-PGPUB; USPAT	OR	ON	2007/07/20 08:41
L4	16	(image WITH segment\$) AND (identify\$3 WITH background WITH region) AND ( luminance WITH histogram)	US-PGPUB; USPAT	OR	ON	2007/07/20 08:42
L5	2	(image WITH segment\$) AND (identify\$3 WITH background WITH region) AND ( luminance WITH histogram) AND (histogram WITH bin)	US-PGPUB; USPAT	OR	ON	2007/07/20 08:43
L6	1	("6973213").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 08:45
L7	1	("20050163374").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 08:50
L8	491	identify\$3 WITH background WITH region	US-PGPUB; USPAT	OR	ON	2007/07/20 08:50
L9	19	(identify\$3 WITH background WITH region) AND (luminance WITH histogram)	US-PGPUB; USPAT	OR	ON	2007/07/20 08:56
L10	2	(identify\$3 WITH background WITH region) AND (luminance WITH histogram) AND (histogram WITH bin)	US-PGPUB; USPAT	OR	ON	2007/07/20 08:56
L11	1	(identify\$3 WITH background WITH region) AND (luminance WITH histogram) AND (compar\$3 WITH histogram WITH threshold)	US-PGPUB; USPAT	OR	ON	2007/07/20 09:21
L12	1370	luminance WITH histogram	US-PGPUB; USPAT	OR	ON	2007/07/20 09:21
L13	1150	(luminance WITH histogram) AND (compar\$3 histogram WITH threshold)	US-PGPUB; USPAT	OR	ON	2007/07/20 09:23
L14	2	(luminance WITH histogram) AND (identify\$3 WITH maximum WITH number WITH pixel) AND (compar\$3 histogram WITH threshold)	US-PGPUB; USPAT	OR	ON	2007/07/20 10:21

## EAST Search History

L15	8	"6628833"	US-PGPUB; USPAT	OR	ON	2007/07/20 10:22
L16	1	("6628833").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:22
L17	30	(image WITH segment\$) AND (expand\$3 WITH background WITH region\$)	US-PGPUB; USPAT	OR	ON	2007/07/20 10:53
L18	11	(image WITH segment\$) SAME (expand\$3 WITH background WITH region\$)	US-PGPUB; USPAT	OR	ON	2007/07/20 10:55
L19	1	("5177795").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:56
L20	1	("5177795").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:57
L21	1	("4998122").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:57
L22	1	("5202933").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:57
L23	1	("5121224").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:57
L24	1	("5278919").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:57
L25	1	("5883973").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:58
L26	1	("5280367").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:58
L27	1	("5369507").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:58
L28	1	("5546474").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:58
L29	1	("5555556").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:58
L30	1	("5892843").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:58
L31	1	("5587808").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:58
L32	1	("5767978").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:59
L33	1	("5778092").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:59
L34	1	("5812695").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:59
L35	1	("6181829").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:59

## EAST Search History

L36	1	("6185328").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:59
L37	1	("6295371").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 10:59
L38	1	("6229923").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 11:00
L39	1	("6301386").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 11:00
L40	1	("6347153").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 11:00
L41	1	("6393150").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 11:00
L42	1	("6411735").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 11:00
L43	1	("6424742").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 11:01
L44	1	("6437881").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 11:01
L45	1	("6507670").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 11:01
L46	1	("20020006220").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 11:01
L47	1	("20020076107").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 11:01
L48	1	("6628833").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 13:48
L49	2	(image WITH segmentation) AND (chrominance WITH histogram WITH data)	US-PGPUB; USPAT	OR	ON	2007/07/20 14:57
L50	1	("6687400").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 14:58
L51	1	("6973213").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 17:00
L52	1	("6973213").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 17:00
L53	1	("6687400").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 17:00
L54	1	("6628833").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 17:01
L55	1	("6731800").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 17:01
L56	1	("6449396").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 17:01

## EAST Search History

L57	1	("6564176").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 17:02
L58	1	("6088392").PN.	US-PGPUB; USPAT	OR	OFF	2007/07/20 17:02
S1	7044	(image with segment\$) SAME (pixel AND text AND background AND region AND contone AND sub region)	US-PGPUB; USPAT	OR	ON	2007/01/31 10:42
S3	2214	(image with segment\$) SAME (pixel AND text AND background AND region AND contone AND sub region AND area)	US-PGPUB; USPAT	OR	ON	2007/01/30 17:20
S4	391	(382/164).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/01/31 13:44
S5	2	(image WITH segment\$) SAME (pixel AND text AND background AND region AND contone AND digital AND photograph\$)	US-PGPUB; USPAT	OR	ON	2007/07/20 08:39
S6	1	("5379122").PN.	US-PGPUB; USPAT	OR	OFF	2007/01/31 16:03
S7	39	(image ADJ1 segmentat\$) SAME (pixel AND text AND background)	US-PGPUB; USPAT	OR	ON	2007/02/01 10:14
S8	355792	(picture OR contone OR image) SAME (pixel AND background AND text OR line OR character OR black )	US-PGPUB; USPAT	OR	ON	2007/01/31 16:09
S10	39	S7 AND S8	US-PGPUB; USPAT	OR	ON	2007/01/31 16:40
S11	1	("5742703").PN.	US-PGPUB; USPAT	OR	OFF	2007/01/31 17:09
S12	1	("6449396").PN.	US-PGPUB; USPAT	OR	OFF	2007/01/31 17:09
S13	1	("5274472").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/01 09:10
S14	1	("5485289").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/01 09:19
S15	1	("5742703").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/01 10:10
S16	7013	(image ADJ1 segment\$)	US-PGPUB; USPAT	OR	ON	2007/02/01 10:10
S17	7	(background ADJ1 image ADJ1 segment\$) SAME (text AND contone OR picture)	US-PGPUB; USPAT	OR	ON	2007/02/01 10:13
S18	39	(image ADJ1 segmentat\$) SAME (pixel AND text AND background)	US-PGPUB; USPAT	OR	ON	2007/02/01 10:59

## EAST Search History

S19	58	(image ADJ1 segmentation ) SAME (text AND background)	US-PGPUB; USPAT	OR	ON	2007/02/01 11:02
S20	14033	(image OR contone OR picture) SAME (text AND background )	US-PGPUB; USPAT	OR	ON	2007/02/01 11:03
S21	58	S19 and S20	US-PGPUB; USPAT	OR	ON	2007/02/01 12:45
S22	1	"20050163374"	US-PGPUB; USPAT	OR	ON	2007/02/01 14:53
S23	9	"6449396"	US-PGPUB; USPAT	OR	ON	2007/02/01 14:53
S24	1	("6449396").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/01 15:06
S25	4	pixel SAME (chrominace AND luminance AND hue)	US-PGPUB; USPAT	OR	ON	2007/02/01 15:10
S26	23724	pixel SAME (luminance OR chrominance OR hue)	US-PGPUB; USPAT	OR	ON	2007/02/01 15:15
S27	5	(image WITH segmentation) SAME (pixel AND downsampling)	US-PGPUB; USPAT	OR	ON	2007/02/01 15:15
S28	1	S26 and S27	US-PGPUB; USPAT	OR	ON	2007/02/01 15:15
S29	60	(pixel WITH image WITH segmentation) SAME (luminance OR chrominance OR hue AND downsampling)	US-PGPUB; USPAT	OR	ON	2007/02/01 15:20
S30	20	(pixel WITH image WITH segmentation) SAME (downsampling AND luminance OR chrominance)	US-PGPUB; USPAT	OR	ON	2007/02/01 15:27
S31	1	(pixel WITH image WITH segmentation) SAME (downsampling AND luminance )	US-PGPUB; USPAT	OR	ON	2007/02/01 15:41
S32	0	(pixel WITH image WITH segmentation) SAME (downsampling AND chrominace )	US-PGPUB; USPAT	OR	ON	2007/02/01 15:22
S33	1	("6449396").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/01 15:27
S34	0	downsamling WITH pixel	US-PGPUB; USPAT	OR	ON	2007/02/01 15:41
S35	16175	downsamling SAME pixel SAME image SAME segmentation SAME luminance OR chrominance	US-PGPUB; USPAT	OR	ON	2007/02/01 15:44
S36	1	downsampl\$ WITH pixel SAME (segmentation AND luminance)	US-PGPUB; USPAT	OR	ON	2007/02/01 15:45
S37	1	downsampl\$ WITH pixel SAME (segmentation AND text )	US-PGPUB; USPAT	OR	ON	2007/02/01 15:46

## EAST Search History

S38	10	image SAME segmentation SAME (pixel AND downsampl\$)	US-PGPUB; USPAT	OR	ON	2007/02/01 16:48
S39	254	(382/171).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/02/01 16:48
S40	254	382/171.ccls. AndmorphologicalAnderosion	US-PGPUB; USPAT	OR	ON	2007/02/01 16:49
S41	5	382/171.ccls. AND (morphological AND erosion)	US-PGPUB; USPAT	OR	ON	2007/02/02 09:18
S42	1	"6985612"	US-PGPUB; USPAT	OR	ON	2007/02/01 17:12
S43	1	382/171.ccls. AND (morphological AND erosion AND downsampling)	US-PGPUB; USPAT	OR	ON	2007/02/01 17:16
S44	1	382/176.ccls. AND (morphological AND erosion AND downsampling)	US-PGPUB; USPAT	OR	ON	2007/02/01 17:16
S49	1	(morphological AND erosion AND downsampling) SAME (image WITH segmentation)	US-PGPUB; USPAT	OR	ON	2007/02/01 17:20
S50	1	"6973213"	US-PGPUB; USPAT	OR	ON	2007/02/02 08:25
S51	9	"6449396"	US-PGPUB; USPAT	OR	ON	2007/02/02 08:43
S52	1	("6449396").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/02 09:01
S53	71	382/308.ccls. AND erosion	US-PGPUB; USPAT	OR	ON	2007/02/02 10:19
S54	1	(image WITH segmentation) SAME (discriminat\$ AND standard AND deviation AND spread)	US-PGPUB; USPAT	OR	ON	2007/02/02 10:21
S55	32	discriminat\$ same (standard AND deviation AND spread)	US-PGPUB; USPAT	OR	ON	2007/02/02 11:30
S56	541	(382/176).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/02/02 10:29
S57	219	(382/180).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/02/02 10:30
S58	1	("6973213").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/02 12:26
S59	1	("6449396").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/02 12:27
S60	40	(image WITH segmentation) SAME (pixel AND threshold AND text AND background)	US-PGPUB; USPAT	OR	ON	2007/02/02 12:48
S61	11	(image WITH segmentation) SAME (pixel AND threshold AND text AND background AND above AND exceed)	US-PGPUB; USPAT	OR	ON	2007/02/02 13:02

## EAST Search History

S62	239	(pixel WITH threshold) SAME (feature AND above AND exceed)	US-PGPUB; USPAT	OR	ON	2007/02/02 13:03
S63	0	(pixel WITH threshold WITH text WITH background) SAME (feature AND above AND exceed)	US-PGPUB; USPAT	OR	ON	2007/02/02 13:04
S64	4	(pixel WITH threshold ) SAME (feature AND above AND exceed AND text AND background)	US-PGPUB; USPAT	OR	ON	2007/02/02 13:35
S65	27	(text WITH pixel) SAME (threshold AND above AND feature)	US-PGPUB; USPAT	OR	ON	2007/02/02 13:59
S66	567	(background WITH pixel) SAME (threshold AND above AND feature OR exceed)	US-PGPUB; USPAT	OR	ON	2007/02/02 13:37
S67	7	S65 and S66	US-PGPUB; USPAT	OR	ON	2007/02/02 16:08
S68	1	"6973213"	US-PGPUB; USPAT	OR	ON	2007/02/02 16:08
S69	1	("6973213").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/02 16:08
S70	1	("6973213").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 12:46
S71	1	("6985612").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 12:46
S72	1	("6973213").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 12:47
S73	1	("6449396").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 12:47
S74	1	("6952502").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 12:48
S75	1	("6564176").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 12:48
S76	1	("20020149578").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 12:49
S77	1	("20040017579").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 12:55
S78	1	("5177795").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 12:56
S79	1	("4998122").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 12:57
S80	1	("5202933").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 12:59
S81	1	("5121224").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 13:00
S82	1	("5278919").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 13:00

## EAST Search History

S83	1	("5883973").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:40
S84	1	("5280367").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:40
S85	1	("5369507").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:41
S86	1	("5546474").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:41
S87	1	("5555556").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:42
S88	1	("5892843").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:42
S89	1	("5587808").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:43
S90	1	("5767978").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:43
S91	1	("5778092").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:43
S92	1	("5812695").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:44
S93	1	("6181829").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:45
S94	1	("6185328").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:45
S95	1	("6295371").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:46
S96	1	("6229923").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:46
S97	1	("6301386").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:46
S98	1	("6347153").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:47
S99	1	("6393150").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:47
S10 0	1	("6411735").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:48
S10 1	1	("6424742").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:48
S10 2	1	("6437881").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:49
S10 3	1	("6507670").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:49
S10 4	1	("20020006220").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 14:49



## EAST Search History

S105	1	("20020076107").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 16:08
S106	1	("6694056").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/05 16:08
S107	1	(image WITH segmentation) SAME (standard AND deviation AND spread AND threshold AND luminance AND histogram AND background)	US-PGPUB; USPAT	OR	ON	2007/02/16 08:49
S108	1	(image WITH segmentation) SAME (standard AND deviation AND spread AND threshold AND histogram AND background)	US-PGPUB; USPAT	OR	ON	2007/02/16 08:50
S109	1	(image WITH segmentation) SAME (standard AND deviation AND spread AND histogram AND background)	US-PGPUB; USPAT	OR	ON	2007/02/16 08:50
S110	1	(image WITH segmentation) SAME (standard AND deviation AND spread AND histogram )	US-PGPUB; USPAT	OR	ON	2007/02/16 08:50
S111	32	(image WITH segmentation) SAME (standard AND deviation AND histogram)	US-PGPUB; USPAT	OR	ON	2007/02/16 09:19
S112	1	(standard WITH deviation WITH spread) SAME (text AND threshold AND histogram AND background)	US-PGPUB; USPAT	OR	ON	2007/02/16 08:55
S113	1	("20040017579").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/16 09:01
S114	1	("20020149578").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/16 09:01
S115	1	(image WITH segmentation) SAME (text AND background AND standard AND deviation AND histogram)	US-PGPUB; USPAT	OR	ON	2007/02/16 09:20
S116	1	(image WITH segmentation) SAME (text AND standard AND deviation AND histogram)	US-PGPUB; USPAT	OR	ON	2007/02/16 09:20
S117	0	(image WITH segmentation WITH text WITH background) SAME ( standard AND deviation AND histogram)	US-PGPUB; USPAT	OR	ON	2007/02/16 09:21
S118	0	(image WITH segmentation WITH text ) SAME ( standard AND deviation AND histogram)	US-PGPUB; USPAT	OR	ON	2007/02/16 09:21
S119	12	(background AND text ) SAME ( standard AND deviation AND histogram)	US-PGPUB; USPAT	OR	ON	2007/02/16 13:53

## EAST Search History

S12 0	1	(background AND text AND segmentation ) SAME ( standard AND deviation AND histogram)	US-PGPUB; USPAT	OR	ON	2007/02/16 09:22
S12 1	11	(background AND text AND image ) SAME ( standard AND deviation AND histogram)	US-PGPUB; USPAT	OR	ON	2007/02/16 09:23
S12 2	1	("20030072487").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/16 11:26
S12 3	1	("6628833").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/16 11:26
S12 4	1	("20020075465").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/16 14:43
S12 5	0	("9317844").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/16 14:43
S12 6	0	(09/317844).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/02/16 14:43
S12 7	1	09/317844	US-PGPUB; USPAT	OR	ON	2007/02/16 15:06
S12 8	6	"6628833"	US-PGPUB; USPAT	OR	ON	2007/02/16 15:07
S12 9	1	("6628833").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/16 15:26